# THE STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

## RHODE ISLAND DEPARTMENT OF TRANSPORTATION

## PROPOSED REVISIONS TO:

"RULES AND REGULATIONS CONCERNING PERMISSION FOR USE OF STATE HIGHWAY RIGHTS-OF-WAY"

**NOVEMBER 2004** 

### 1.0 <u>AUTHORITY AND PURPOSE</u>

- 1.1\_ The following Rules and Regulations are promulgated to administer Chapter 24-8 of the Rhode Island General Laws of 1956, as amended, and supercede all previous Rules and Regulations adopted heretofore.
- 1.2 The purpose of these Rules and Regulations is to prescribe conditions pursuant to Rhode Island General Laws, Chapter 24-8, under which the Rhode Island Department of Transportation will allow access alterations, by Physical Alteration Permit, in the following circumstances:

Curbs

Sidewalks

**Highway Access** 

Stormwater Disposal

Construction Within the State Highway Right-of-Way

**Traffic Signals** 

Signage

2.0 **POLICY** - It is the policy of the Rhode Island Department of Transportation that all construction and modification, over, on, under, or otherwise affecting the State Highway Right-of-Way will be regulated and controlled by the Rhode Island Department of Transportation for the best interest and safety of the public, and according to recognized engineering standards. In addition, it is the policy of the Rhode Island Department of Transportation to regulate and control all stormwater runoff to the state highway drainage system without regard to the location of the source of runoff.

- 3.0 **<u>DEFINITIONS</u>** Except as otherwise indicated, the following definitions shall apply:
- 3.1 Alteration: Any change of existing conditions within the State Highway Right-of-Way (ROW).
- 3.2 **Applicant:** Any individual, firm, corporation, partnership or agency, public or private, that has filed a Physical Alteration Permit Application.
- 3.3 **Application:** Physical Alteration Permit Application.
- 3.4 **Circular Driveway:** A Residential driveway with two (2) access openings on the same frontage.
- 3.5 **Commercial:** Relating to any property use other than for an individual, single-family dwelling **or multi unit development.**
- 3.6 **Construction Within the State Highway Right-of-Way:** The alteration of any structure, creation of any new structure or physical modification within the State Right-of-Way.
- 3.7 **Curb:** Curbline: The edge of highway pavement.
- 3.8 **Department:** The Rhode Island Department of Transportation.
- 3.9 **Director:** The Director of the Rhode Island Department of Transportation, whose address is Room 210, State Office Building, Providence, Rhode Island.
- 3.10 **Driveway:** Opening to a highway that permits ingress and/or egress by vehicles.
- 3.11 **Driveway Types:**
- 3.11.1 **Residential:** A driveway leading to an individual, single-family dwelling or multi unit development.
- 3.11.2 **Commercial:** Any driveway that is not a driveway to an individual, single-family dwelling.
- 3.12 **Permission:** Approval by the Rhode Island Department of Transportation of a Physical Alteration Permit Application.
- 3.13 Landscaping: Landscaping shall include the Physical Alteration of the existing outdoor areas through the planting of shrubs, trees, and ground covers, the placing of sod or seed, and/or the removal or pruning of existing plant materials (i.e. shrubs, trees, and ground covers). Landscaping shall include the physical alteration of the existing right-of-way (beyond the roadway area) through selective clearing or pruning of existing vegetation and/or the installation of new plant material (trees, shrubs, perennials or ground cover)

#### and new grass areas.

- 3.14 **Permit:** Physical Alteration Permit.
- 3.0 **DEFINITIONS** Continued
- 3.15 **Permittee:** Recipient of a Physical Alteration Permit.
- 3.16 **Residential:** Relating to an individual, single-family dwelling **or multi unit development.**
- 3.17 **Roadway:** A means of vehicular access to a State Highway Right-of-Way that serves more than one, single-individual family dwelling a residential or commercial establishment development.
- 3.18 **Rural:** All locations not included under the Urban definition shall be considered Rural.
- 3.19 **Setback:** The lateral distance between the State Highway Right-of-Way line and a roadside building, gasoline pump curb base, display stand or other object, the use of which will result in space for vehicles to stop or park between such facilities and the State Highway Right-of-Way.
- 3.20 **State Highway Right-of-Way (R.O.W.):** Land and space acquired for, or dedicated to, highway use.
- 3.21 **Sidewalk:** Area beside a roadway available for pedestrian use regardless of the existence of pavement.
- 3.22 **State Road (State Highway) Drainage System:** The network of culverts, ditches, pipes, swales, gutters and other man-made and natural courses for draining stormwater runoff from State Highways.
- 3.23 **Urban:** An area, either incorporated or unincorporated, which has been developed primarily for residential and/or business purposes. An Urban area is generally characterized by: speed limits of 40 miles per hour or less, streets or highways are generally curbed, and at least fifty (50) percent of the frontage on one side of the highway within one-half mile of the site for which a permit has been requested is developed with residences and/or businesses.
- 3.24 **Gender of Words:** Every word importing the masculine gender only, shall be construed to extend to and include females as well as males.
- 3.25 Maintenance Division: The Maintenance Division of the Rhode Island Department of Transportation, whose address is 360 Lincoln Avenue, Warwick, RI 02888.
- 3.26 Adopt-A-Spot Program: A private group or individuals can adopt small portions of

state land (ie: a small island) for the purpose of installing new plant material and/or keeping the area's existing vegetation, including grass, in a neat appearance. No selective clearing or pruning of large trees will be allowed under the Adopt-A-Spot Program.

#### 3.0 **DEFINITIONS** - Continued

3.27 Adopt-A-Highway Program: Is a beautification program that is managed by the Department's, Highway and Bridge Maintenance Division. It is a means for private citizens, organizations, non-profit groups, businesses and/or individuals to help their community by cleaning a 2-mile segment of a secondary roadway at least 4 times per year. This is an inexpensive way for citizens to support our state's anti-litter efforts and gain tremendous satisfaction in making a contribution to their community and our state.

For more information about the Adopt-A-Highway Program and to apply, please log onto the Rhode Island Department of Transportation Home Page @ www.dot.state.ri.us and select the Adopt-A-Highway link.

#### 4.0 PHYSICAL ALTERATION PERMIT PROCESS

- 4.1 Anyone seeking the permission of the Director as described herein by these Regulations, shall follow the procedure delineated below pursuant to Rhode Island General Law, Sections 24-8-9, 24-8-33 and 24-8-34.
- 4.2 No person, firm, corporation, utility company or agency may place or alter curbs, make a connection to, or pump or drain water to, the State Highway drainage system, or in any way make any alteration to the State Highway system without first obtaining a Physical Alteration Permit.
- 4.3 No access by driveway to a State Highway will be made without first obtaining a Physical Alteration Permit.
- 4.4 An applicant may obtain the Physical Alteration Permit Application at a Department of Transportation, Maintenance Division facility, **or on-line** @ www.dot.state.ri.us. At the same time, the applicant should become familiar with the applicable Regulations and Standards to avoid a resubmission fee. These Regulations and other Standards will be available **on-line** for review *and* at said facility during normal business hours.
- 4.5 Upon completion of the application, the applicant will then file the completed Physical Alteration Permit Application with all necessary copies of plans and computations required for the type of access as prescribed in these rules. Applications should be filed at any the Division of Maintenance facility Division Headquarters, 360 Lincoln Avenue, Warwick, RI 02888. For commercial applications, an estimated cost, based on items required, of the construction operations within the State Highway Right-of-Way will be required.
- 4.6 When the application is submitted, the applicant must provide written proof that the City Engineer or Building Inspector **or other authorized agent** of the affected municipality has received copies of plans describing the proposed alteration. This is not a requirement to obtain a Building Permit before applying for a Physical Alteration Permit but assurance that the local government has been apprised of the applicant's intention.
- 4.7 For any applications relating to a commercial alteration, all computations, plans and statements must be approved and stamped by a **Rhode Island** Registered Professional Engineer. If there is no drainage effect on the State Highway drainage system, the stamp of a **Rhode Island** Registered Land Surveyor will be an acceptable substitute. When any landscaping is part of the commercial application and it is on state property, the landscape plan must be stamped by a **Rhode Island Registered Landscape Architect.** Professional stamps may be required for individual, single-family dwellings at the discretion of the Maintenance Division-Department.
- 4.8 Any alteration that affects drainage within the State Highway Right-of-Way will require the stamp of a **Rhode Island** Registered Professional Engineer.
- 4.9 After the applicant has submitted the required materials, the application will, within a reasonable time, be reviewed by Department staff personnel.

4.9 During the review process, the applicant must, at his own expense, provide any additional information relevant to regarding the proposed access alteration requested by the Department.

### 4.0 **PHYSICAL ALTERATION PERMIT PROCESS** - Continued

- 4.10 As a result of the review, the application will be either approved as submitted within standard conditions, approved with additional conditions, or denied as submitted. The applicant will be notified by mail of the decision.
- 4.11 An applicant dissatisfied with the decision of the Department may appeal to the Director. The appeal must be in writing, and submitted to the Director within ten (10) days of the receipt of the decision. The appeal must include a copy of the decision.
- 4.12 Applicants for major projects are encouraged to coordinate early with the RIDOT. Detailed plans may require staged submissions (10%, 30%, 90% and Final).
- 4.13 Scenic Roadways In accordance with State Statue, certain roadways are designated Scenic Roadways and any alteration within the highway right-of-way must receive the approval of the RI Scenic Roadways Board along with the Department's approval through the Physical Alteration Permit process. It is the responsibility of the applicant to check with the local community (or online at www.dot.state.ri.us) to see if the proposed alteration is on a Designated Scenic Roadway and provide the Department with a written determination.
- 4.14 Coordination with the Historic Preservation and Heritage Commission (HPHC). The Department will submit a copy of the application to HPHC for comments. HPHC will respond within 30 days. The Applicant will be responsible for addressing any comments to HPHC. Permission will not be granted until HPHC comments are resolved.
- 4.15 All major commercial developments located on a RIPTA route may be required to submit to the Rhode Island Public Transit Authority (RIPTA) in order to secure feedback on the plans ability to accommodate mass transit. Any Commercial Application involving a location on a route serviced by the Rhode Island Public Transit Authority (RIPTA) may be subject to review and comment by RIPTA of mass transit issues.
- 4.16 Change in Property Ownership It is the responsibility of the current owner/permittee to notify the Rhode Island Department of Transportation of the sale of the property and to provide the name, address, and telephone number of the new owner so that the permit may be transferred to the new owner. Failure of he owner/permittee to notify the Department or failure by the new owner to accept transfer of the permit will result in the current owner/permittee being responsible for all future work done under the permit.

#### 5.0 **FEES**

- 5.1 No application, or resubmission of a denied application, for a Physical Alteration Permit will be accepted from any person, firm, corporation, or other entity without fee payment. Federal, State and Municipal Governments are exempt from fee payments.
- Payment must be in the form of check or money order made payable to R.I.D.O.T. P.A.P. Program General Treasurer, State of Rhode Island. CASH WILL NOT BE ACCEPTED.
- 5.3 Per Submission: Application Fees:

Residential: \$25.00 Commercial: \$100.00

#### **Residential:**

Single Family	\$	100.
Multiple Access Unit Permits		
(A) 5 units or less	\$	200.
(B) 6-49 units		<b>500.</b>
©) 50+ units	2.	000.

#### **Commercial:**

(A) <25,000 sq. ft. Building (s)	\$1,000.
(B) 25,000-300,000 sq. ft. Building (s)	1,500.
C) >300,001-750,000 sq. ft. Building (s)	2,000.
(D) >750,000 sq. ft. Building (s)	3,000.

Traffic Signal: \$5,000./per signal

Sign Installation \$ 200.

- 5.4 Fees are not refundable.
- 5.5 The Permit obtained is valid for one year from date of issuance. This Permit may be renewed for one additional year at no cost by requesting an extension in writing, including a statement that conditions have not changed from the initial submission. A second extension may also be obtained by complying with the conditions for the first extension and paying an additional **fee equal to the original** submission fee. No additional extensions will be permitted.

#### 5.6 BOND REQUIREMENTS

The Permittee will be required to give security or to submit a performance bond for approval by the Department prior to the issuance of any Physical Alteration Permit. If the costs of the proposed Alteration under the Permit exceed \$25,000, the Permittee shall furnish a performance bond in the amount of one hundred percent (100%) of such

costs, conditioned upon the faithful performance of work associated with the Permit in accordance with all applicable specifications and conditions. Such bond shall be solely for the protection of the Rhode Island Department of Transportation and the State of Rhode Island. The bond submitted to the Department shall be provided by a surety both acceptable to the Department and licensed and authorized to conduct business in the State of Rhode Island. All surety companies must be listed with the Department of the Treasury, Fiscal Services, Circular 570, (Latest Revision published by the Federal Register or available at <a href="http://www.treas.gov">http://www.treas.gov</a>). The Department may require an additional amount of bond in connection with work added to the Permit by changes, additions and modifications by directing the Permittee to increase the penal amount of the existing bond or to obtain an additional bond.

If the costs of the proposed Alteration under the Permit are less than \$25,000, the Permittee may be required to give security by depositing assets or other performance guarantee in a form acceptable to the Department in the amount of one hundred percent (100%) of such costs. If the Permittee has deposited assets instead of furnishing sureties for any bond required under the Permit and the assets are in the form of checks, currency, or drafts, the Department will hold the assets in an account for the Permittee's benefit. Upon completion of the work associated with the Permit, the Permittee's funds from such assets will be returned as soon as possible, unless the Department determines that part or all of the funds are required to compensate the Department for costs it incurs as a result of the Permittee's delay, default or failure to perform. In such a case, the funds will be available to compensate the Department.

#### 5.7 Insurance

The Permittee or the Permittee's contractor will obtain and carry for the period of time required for the completion of the work associated with the Permit, including the repair and restoration of the State Highway Right-of-Way, and also during such future periods of time when operations are performed involving the repair, relocation, or removal of any work associated with the Permit, a liability and property damage insurance policy or policies which indemnify, defend, and hold the Department harmless from any damages arising out of operations associated with the Permit. The said insurance will provide, as a minimum, coverage in the following amounts: \$500,000.00 for property damage resulting from any single occurrence (\$1,000,000.00 aggregate) and \$500,000.00 for the death or injury of any person, subject to a limit of \$1,000,000.00 for injuries or deaths resulting from any single occurrence. The said insurance policy, or policies, will be with an insurance company authorized and licensed to do business in the State of Rhode Island. A copy of the policy, or policies, or certificate evidencing the same, will be submitted to the Department for approval prior to commencing any Alteration or Construction within the State Highway Right-of-Way associated with the Permit. The Department will be named as an additional insured on all policies. The Department, in its sole discretion, may waive the requirement for insurance.

### 5.8 Inspection Services

If costs are over \$25,000. the applicant must hire a RIDOT approved construction inspection company that will need to certify that all work associated with the roadway and appurtenances is performed in accordance with RI Standard Specifications including any amendments thereto. The Inspection Company will be required to be present during specific phases of work as required by the RIDOT, prior to commencement of any work. All costs will be borne by the Permittee.

#### 6.0 GENERAL RESTRICTIONS

- 6.1 A Physical Alteration Permit is required prior to any construction in, access to, or alteration in to, or any increase in drainage flow to the State Highway Right-of-Way.
- 6.2 **Right-of-Way Encroachment:** No part of the State Highway Right-of-Way is to be used for servicing of vehicles, displays, or for private business. The area between the pavement and the limit of the Right-of-Way (Buffer Area) shall be clear of buildings, sales exhibits, signs, parking areas, service equipment and appurtenances thereto. Notwithstanding, use by police, emergency vehicles and for emergencies is acceptable at all times.
- 6.3 **Parking:** Each roadside facility will provide sufficient parking or storage space off the State Highway Right-of-Way to prevent the storage of vehicles on the driveway or the backing up of traffic onto the travel lanes or shoulders.
- 6.4 <u>Setbacks</u>: Driveway access will not be permitted where sufficient setback is not available to prevent parking, stopping, and maneuvering within the State Highway Right-of-Way in the operations of a commercial enterprise. This generally means at least ten (10) feet from the State Highway Right-of-Way to the subject facility for operations of vehicles parallel to the centerline of the adjacent highway, and at least forty (40) feet from the State Highway Right-of-Way to the subject facility for operation of vehicles perpendicular to the centerline of the adjacent highway.
- 6.5 <u>Location of Driveways</u>: Driveways shall be so located as to result in no undue interference with, or hazard to, the free movement of normal highway traffic. To minimize congestion, and provide adequate safeguards for the public safety, driveway locations shall be avoided near intersections and rotaries. Also to be avoided are locations that would interfere with the placement and proper function of highway signs, signals, lighting or other devices that affect traffic operations. **Driveways should not interfere with RIPTA bus stops.**
- Protection of the Traveling Public: The Permittee shall properly safe-guard all work performed under permit and maintain sufficient working light, Rhode Island Standard Details signs and safety devices. Traffic control shall be provided by the Permittee according to the standards of the United States Department of Transportation Federal Highway Administration "Manual On Uniform Traffic Control Devices For Streets And Highways" as amended. This protection will be maintained until the project has been completed.
- 6.7 **Protection from Suits:** As a condition of receipt of a permit, the Permittee shall defend, indemnify, protect and save harmless the State and its agents, servants and employees from and against any and all suits, claims, losses, demands or damages of whatever kind or nature arising out of or claimed to arise out of, any act, error or omission of the Permittee, its agents, servants and employees in the **engineering design and/or** performance of work covered by this permit. At the discretion of the Department of Transportation, a performance bond may be required.

- 6.0 **GENERAL RESTRICTIONS** Continued
- 6.8 **Land Use Change:** Should the use of property with legal access to a State Highway be altered or should its present use cause expansion of traffic, a reassessment by the Rhode Island Department of Transportation of the use of the openings and impact on drainage shall be accomplished through the Physical Alteration Permit process.
- 6.9 <u>Landscaping</u>: There will be no landscaping on or over the State Highway Right-of-Way without prior written approval by the Rhode Island Department of Transportation. This permission will be obtained through the Physical Alteration Permit process, including a site grading plan locating, naming and describing the desired arrangement, including the ultimate size of the plants involved. There will be no landscaping within the State Highway Right-of-Way without written approval by the Rhode Island Department of Transportation. This permission will be obtained through the Physical Alteration Permit Process and the landscape plan must include a site grading plan (if applicable) and a landscape plan showing the proposed planting layout and a plant list (Botanical and Common Name, Size, Root and Spacing). The Landscape Plan and Site Plan must be stamped by a Rhode Island Registered Landscape Architect.

All Landscape Plans must be stamped by a Rhode Island Registered Landscape Architect unless this requirement is waived in writing by the Department's. Supervising Landscape Architect.

- 6.10 <u>Control Dimensions</u>: All driveway access to a State Highway Right-of-Way must conform to the Control Dimensions published in Section 13 of these Rules and Regulations.
- 6.11 Drive-thrus: For all applications involving drive-thru coffee/donut establishments or drive-thru car washes, the applicant must demonstrate that there is adequate space available to stack a minimum of ten (10) vehicles on site. This is to diminish the likelihood of vehicles stacking out into the State Highway and potentially blocking lanes of travel. For any other type drive-thru establishment (sandwich restaurant, pharmacy, banks, etc.) which does not typically exhibit such dramatic usage peaks; adequate space to stack a minimum of five (5) vehicles on site must be demonstrated. In both cases above, the stacking space shall be measured from the order board or first point of contact with the business.
- 6.12 Car Wash Facilities: All applications will require Shaker Bumps at the exits of the bays. Drainage control of all water associated with the car wash must be controlled in such a manner as to prevent the spread of water on the highway pavement especially during cold weather.
- 6.13 In addition to a Physical Alteration Permit for a sign installation, the permittee will be required to acquire a license from the Department for use of the State Highway Right-of-Way.

## 7.0 **CONSTRUCTION WITHIN THE RIGHT-OF-WAY**

- All construction within the State Right-of-Way will conform to procedures and specifications delineated in the "State of Rhode Island and Providence Plantations, Department of Transportation, Division of Public Works,—Standards and Specifications for Road and Bridge Construction, and Standard Details," including all revisions in use as approved by the Department at the time of the Physical Alteration Permit submission.
- 7.2 Absolutely no construction will take place within the State Highway Right-of-Way without a Permit having been issued approving the construction. Any construction or change to existing topography off of State Highway Right-of-Way which causes additional flow of water onto or into the state highway drainage system is also prohibited without a Permit.

#### 8.0 **DRIVEWAYS**

- 8.1 After adoption of these Rules and Regulations, Driveway access to the State Highway Right-of-Way shall not be allowed without a Physical Alteration Permit.
- 8.2 Where a driveway is provided to a commercial establishment from a State Highway Right-of-Way, the buffer area and adjacent border area shall be reasonably cleared so that either the establishment itself or an appropriate sign located outside the State Highway Right-of-Way can be seen at sufficient distance to enable proper and safe maneuvers on the part of drivers desiring to enter or leave the establishment.
- 8.3 The driveway profile of a driveway and the grading of the buffer area shall be such that a driver desiring to enter a State Highway can see a sufficient distance in all directions along the highway to enable him to enter or leave the highway without creating a hazardous situation. This may require installation of a circular driveway.
- 8.4 Where a circular driveway is requested by a Residential applicant, certain conditions must be met.
- 8.4.1 The minimum frontage on a State Highway where a circular driveway will be permitted is seventy (70) feet.
- 8.4.2 The interior edges of the driveways must be spaced at least thirty-five (35) feet apart at the State Highway Right-of-Way line.
- 8.4.3 The driveway openings shall be between ten (10) and twelve (12) feet wide.
- 8.4.4 All other control dimensions apply.

#### 9.0 **CURBING**

- 9.1 No permit shall be issued unless the applicant's plans conform to **the latest edition of the** "Rhode Island Department of Transportation, Division of Public Works, Rhode
  Island Standard Details Chapter 7" as applicable. These Standard Details are available at
  the Division of Maintenance, 90 Calverly Street, Providence, Rhode Island. Maintenance
  Division, 360 Lincoln Avenue, Warwick, Rhode Island. Department of
  Transportation, Office of the Chief Engineer, Room 224, 2 Capitol Hill, Providence,
  Rhode Island or online at www.dot.state.ri.us.
- 9.2 The Department may require that the Permittee place Portland Cement Concrete or Bituminous Cement Concrete curbing in the cases where traffic channelization, control and public safety are concerned. This placement will be done by the Permittee at his own expense.
- 9.3 Where curb is to be altered at a corner **where sidewalks exist**, wheelchair ramps shall be installed.
- 9.4 Where curb is proposed, the applicant will be required to demonstrate that no flooding, ponding or trapping of water on the State Highway pavement will result.

### 10.0 **SIDEWALKS**

- 10.1 Any alteration to a sidewalk adjoining a State Highway within a State Highway Right-of-Way requires a Permit.
- 10.2 In any access that cuts a sidewalk, curb returns and transition curbs will be placed as necessary to maintain the integrity of the sidewalk.
- 10.3 In any location where the sidewalk is crossed, the sidewalk shall either be graded to accommodate wheelchairs, or precast wheelchair ramps shall be installed. Wheelchair ramp grading shall be done in accordance with **Americans with Disabilities Act (ADA) Standards.**
- 10.4 Applicants will be encouraged to install sidewalks in locations where pedestrian traffic is anticipated.

### 11.0 ACCESS - ROADWAYS

- 11.1 Any road, municipal or otherwise, that will, by design, construction or reconstruction, intersect a State Highway Right-of-Way, must be approved through application for and issuance of a Physical Alteration Permit.
- 11.2 For any roadway intersecting a State Highway Right-of-Way, in addition to the Physical Alteration Permit Application with its required submissions, a traffic study and capacity analysis prepared by a **Rhode Island** Registered Professional Engineer will also be required. Any data not available from the Rhode Island Department of Transportation will be the responsibility of the applicant.

#### 12.0 **DRAINAGE**

- 12.1 It shall be unlawful for any person, firm or corporation to make any connection into a State road drainage system, or to drain or pump water onto the traveled surface of a State Highway without first obtaining written permission from the Director of the State Department of Transportation.
- 12.2 When the Permittee intends to grade his property to highway grade, the Permittee must make provision, at his own expense, for disposition of highway drainage by installing pipe, inlets, catch basins, manholes, headwalls and ditches of proper size and material as may be necessary, in the Department's determination, to protect the State's drainage rights.
- 12.3 Where the construction of a driveway necessitates crossing a State Highway drainage ditch, a culvert pipe shall be installed in the ditch by the Permittee at his own expense. The culvert shall be no less than twelve inches in diameter, and of sufficient size to carry the stormwater runoff from a twenty-five (25) year storm, as determined by the National Oceanic and Atmospheric Administration, for the watershed area. Under no circumstances will existing ditches, swales or gutters be filled without adequate alternate provisions for drainage being made and approved through application for and issuance of a permit.
- 12.4 The applicant, in the case of commercial applications, is required to submit detailed computations and site-grading plans for drainage conditions existing and proposed when applying for a Physical Alteration Permit. These computations should be made considering a storm of 10-year frequency with a duration equal to the time of concentration. These computations and plans should be approved and stamped by a **Rhode Island** Registered Professional Engineer. If storm drainage will not affect the State Highway drainage system, a statement of no impact should be submitted with a Physical Alteration Permit Application approved and stamped by a **Rhode Island** Registered Professional Engineer, or a **Rhode Island** Registered Land Surveyor when the property in question is graded away from the State Highway Drainage System.
- 12.5 Drainage Appurtenances All facilities, pipes, drains, catch basins, manholes and other appurtenances will be as indicated in "Rhode Island Department of Transportation, Division of Public Works, Standard Details."
- 12.6 The applicant will be responsible to show <u>no increase</u> in total to both either peak flow and or total volume of run off from existing conditions entering the State Drainage System in a 10-year storm, unless in the case of total volume the applicant can demonstrate unconditionally that there will be no impact to the receiving [water] body(ies). In addition, if a connection to the State Drainage System is proposed, the applicant will be required to address water quality impacts through incorporation of special drainage structures such as vortechs, and storm ceptors, swirl chambers, sediment ponds, created wetlands (Structural Stormwater Treatment) deep sump catch basins and though use of Best Management Practices (BMP's). Design and construction of all stormwater mitigation shall

## 12.0 - DRAINAGE - continued

be in accordance with the State of Rhode Island "Stormwater Design and Installation Standards Manual" by the Department of Environmental Management (RIDEM) and the RI Coastal Resources Management Council (RICRMC).

- 13.0 <u>CONTROL DIMENSIONS</u> (Letters in parentheses are keyed to example drawings at the end of this Section.)
- 13.1 <u>Driveway Angle, Rural and Urban (D)</u> Angle measured from centerline of highway to centerline of driveway: For two way operation 90 degrees recommended and 60 degrees minimum. For one way operation if used by vehicles in both directions of travel on highway, same as two way use, right turn only; 60 degrees maximum and 45 degrees minimum.

#### 13.2 Driveway Width, Rural and Urban (W)

Residential: 10 Feet - Minimum

20 Feet - Maximum

Commercial: 20 Feet - Maximum for one way use.

35 Feet - Maximum for two way use.

13.3 <u>Edge Clearance (E)</u> - General: All portions of the driveway shall be within frontage boundary lines. For driveways with angles of about 90 degrees, the edge clearance shall not be less than the radius of curvature ®) for the junction of the driveway and pavement edges.

Rural Residential: 15 Feet - Minimum Rural Commercial: 20 Feet - Minimum

Urban Residential: 2 Feet - Minimum Urban Commercial: 10 Feet - Minimum

13.4 Radius of Curvature of Junction of Driveway and Pavement Rural or Urban ®)

Residential: 2 Feet - Minimum

10 Feet - Maximum

Commercial: 5 Feet - Minimum

30 Feet - Maximum

13.5 Corner Clearance ©)

Rural: 40 Feet - Minimum Urban: 20 Feet - Minimum

Where there are traffic signals at the intersection, the near side edge clearance shall be twice the far side.

13.6 **<u>Driveway Profile</u>** - (See Figure 4)

#### 13.0 **CONTROL DIMENSIONS** - Continued

## 13.7 No Highway Edge Curb, Cut Section

From edge of pavement to the edge of the shoulder, the gradient should be the same as the shoulder pitch.

From outer edge of shoulder to low point at ditch line of open culvert edge of shoulder to low point at ditch line or open culvert, maximum downward gradient, 8%

Beyond ditch line, maximum gradient 8% for commercial driveways, 15% for others.

#### 13.8 No Highway Edge Curb, Fill Section

- (1) Slope across shoulder, gradient same as shoulder gradient.
- (2) Beyond outer edge of shoulder, maximum gradient 8% for commercial, 15% for others; vertical curve: As flat as feasible. To prevent drag, vertical curves shall not have a hump or dip greater than 6 inches within wheelbase length of 10 feet. Crest vertical curves shall not exceed a 3½ inch hump in a 10 foot chord, and sag vertical curves shall not exceed a 2 inch depression in a 10 foot chord.
- 13.9 <u>Driveways with a Two Foot Radius</u> All driveways with a two foot radius shall have curb returns conforming to "Rhode Island Department of Transportation, <del>Division of Public Works</del>, Standard Details."
- 13.10 Exceptions Exceptions to the control dimensions and general restrictions may be granted. These exceptions must be approved by the Division Administrator for the Highway and Bridge Maintenance Division for all individual, single-family dwelling cases Assistant Director for the Division of Maintenance for all individual, single-family dwelling cases, and by the Assistant Director for the Division of Public Works in all other cases and by the Chief Engineer of the Department of Transportation in all other cases.

## 14.0 TRAFFIC STUDY / SIGNAL

- 14.1 Traffic impact studies, prepared by a Rhode Island Registered Professional Engineer, must be submitted when a proposed development or redevelopment will generate 100 or more added (new) vehicle trips per hour during the adjacent roadway's peak hour. Or: 1) When changes are proposed in an area already suffering congestion. 2) At the judgement or discretion of the Department. 3) When a traffic signal warrant is met due to the additional trips generated.
- 14.2 Vehicle trips for a proposed development's traffic signal warrant analysis should only be obtained by counting a fully occupied similar development in the area. The development should be similar in both size and function. Trip generation estimates should be obtained by counting a fully occupied similar development in the area. The development should be similar in both size and function. If a similar development does not exist in the area, vehicle trips can be estimated by using the latest ITE Trip Generation Manual. Please note that a traffic signal will not be approved based on warrants met by vehicle trip projections from the Trip Generation Manual. However, once a development is fully functioning and warrants are met on actual vehicle counts, a request for a traffic signal will be fully considered.
- 14.3 Vehicle trips for a proposed development can be estimated by using the latest ITE Trip Generation Manual if a similar development does not exist in the area. ITE trip generation values are acceptable when determining Level of Service or the effect of a proposed development on adjacent roadways.
- 14.4 Loop Detector Easement Agreements, signed by the legal owner of record shall be submitted with the Physical Alteration Permit Application.
- 14.5 Shop Drawings for traffic signal equipment shall be sent to the Department for concurrence after being approved by the engineer who designed the signal.
- 14.6 A traffic signal can be placed into full operation when the following criteria are realized: 1) Geometric improvements are complete. 2) Final pavement markings are in place. 3) Regulatory and warning signs are installed. 4) The signal control equipment is fully programmed, detectors are installed and functioning, and the signal is in actuated operation. 5) If the signal is part of a coordinated system: The interconnect is installed and functioning, and the signals are operating as a coordinated system. 6) The traffic signal installation has been accepted by the Department. 7) The signal has been in flashing mode for at least 14 days. 8.) Loop Detector Easement Agreement must be signed and filed by the Department's Real Estate Section. Installation of the traffic signal hardware is required prior to alterations affecting travel lanes.